

**Deseret Chemical Depot  
Attachment 3  
Training Plan**

## **Training Plan**

### **1. General [R315-3-2.5(b)(12), R315-8-2.7]**

- 1.1** Employee training at Deseret Chemical Depot (DCD) is crucial to the accomplishment of all DCD's missions and the requirement to provide environmental training is a top priority. The DCD Hazardous Waste Management Training Program is a formal program designed to enhance the environmental competencies of its participants and to promote responsible environmental practices throughout the organization. This training was developed and implemented as part of DCD's safety and health program for employees involved in hazardous waste operations. Specific coursework has been outlined for this program, which contains material appropriate for accomplishing these objectives.
- 1.2** This program has evolved into a comprehensive approach to integrating the requirements to the Resource Conservation and Recovery Act (RCRA), Occupational Safety and Health Act (OSHA), the Utah Hazardous Waste Rules (UHWR) and other regulatory training requirements with other meaningful training which will contribute to the employees ability to perform their assigned duties and function in a safe and healthful manner so as not to endanger themselves, other employees, or the environment.

### **2.0 Scope and Application**

- 2.1** Per Army requirements, all DCD employees must receive initial training in Chemical Surety and Hazard Communication. Additionally, employees that are involved in the managing, storage, or handling of hazardous waste at DCD, including those on temporary appointment, are required to complete Hazardous Waste Management training. The types of duties an employee may engage in when dealing with hazardous waste includes, but is not necessarily limited to, engineering, technical work, transportation, containerization, labeling, storage, identification, record keeping, emergency response, and treatment.

### **3.0 Program Administration**

- 3.1** Recordkeeping/Reports/Documentation [R315-8-2.7(a)(2), (d)(1), and (d)(2)]
- 3.2** The Deseret Chemical Depot hazardous waste management training program director is the Director of Risk Management and is responsible for supervising the initial training and annual retraining of personnel. The Director reviews and approves the content, method of presentation, and evaluation techniques for all courses developed in support of DCD's hazardous waste management training program. Training instructors must be a subject matter expert in the area of Hazardous Waste Management.
- 3.3** Personnel training is documented and the appropriate records are maintained at DCD. Training records for current employees will be kept until facility closure. Training records of former employees are kept for three years from the date that the employee last worked at the facility.
- 3.4** Job Description [R315-3-2.5(b)(12), R315-8-2.7(a)(3), (b), (c), (d)(1), and (d)(2)]  
Hazardous Waste Training for new personnel is initiated when they start work at DCD and is completed within six months. Personnel are not allowed to work unsupervised until training is completed. They are not assigned the responsibility of responding to

emergency situations until training in the appropriate responses is completed. As presented in Table 3-1, Hazardous Waste Operations Training Program, the initial training for all DCD employees that are involved in Hazardous Waste operations is 28 hours and the annual refresher training is 9 hours. Personnel who transfer to Hazardous Waste operations from other areas will successfully complete the training program within six months of their transfer.

<b>Table 3-1: Hazardous Waste Operations Training Program</b>		
<b>Course</b>	<b>Initial Training</b>	<b>Annual Refresher Training</b>
Chemical Surety	20 hours	4 hours
DOD Hazard Communication	4 hours	1 hour
Hazardous Waste Management	4 hours	4 hours
Totals:	28 hours	9 hours

A list of employees, who are part of the DCD Hazardous Waste Management Training Program, is maintained by the training program director. This list includes the job titles and positions with the name of each employee filling that position. A written job description for each position, which lists the required skills, and hazardous waste management/handling duties that may be required, is also maintained. It is the responsibility of the employee's supervisor or director to notify the training director when an employee is to be added to or removed from the training program.

Employees that have been identified as performing hazardous waste duties are provided an update to their job description, which outlines their hazardous waste duties. This description of hazardous waste duties is as follows:

Performs hazardous waste management duties and/or hazardous waste worker duties in permitted or regulated facilities. Duties may involve one or more of the following: management, coordination, engineering or technical work involving hazardous waste management programs or projects; and/or movement, containerization, storage, identification, recordkeeping, emergency response, treatment, and/or disposition of hazardous waste. Such duties require the ability to interpret and implement environmental regulations; knowledge of hazardous waste products and safety regulations; and the skill to effect regulatory requirements and ensure proper management and/or handling of hazardous wastes.

Incumbent must successfully complete training in hazardous waste management procedures within six (6) months after the date of appointment to this position and will not work in unsupervised situations until these training requirements have been met. Incumbent must also participate in an annual review of this training.'

#### **4.0     Emergency Response [R315-8-2.7(a)(3)]**

- 4.1**     Emergency response will be handled in accordance with the "Deseret Chemical Depot Installation Spill Contingency Plan (DCD-ISCP)" and/or the "Deseret Chemical Depot Spill Prevention Control and Countermeasures Plan (DCD-SPCCP). If the accident/incident involves chemical surety material, the "Deseret Chemical Depot Chemical Accident/Incident Response and Assistance Plan (DCD-CAIRAP)" will be implemented and will take precedence.

- 4.2 The DCD training program is also designed to ensure that facility personnel are able to respond effectively to emergencies. Test exercises that simulate emergencies at DCD are conducted at regular intervals to practice implementation of the various emergency response plans. At the conclusion of each test exercise, a critique session is held to improve the emergency response prior to an actual emergency.

**5.0 Course Outlines [R315-3-2.5(b)(12), R-315-8-2.7(a)(2)]**

- 5.1 The DCD Hazardous Waste Management Training Program consists of three separate initial training courses and two separate annual refresher courses. The initial courses are as follows:

- 5.1.1 Chemical Surety Basic Course,
- 5.1.2 Department of Defense Hazard Communication Course, and
- 5.1.3 Hazardous Waste Management Course.

- 5.2 Each employee in the DCD Hazardous Waste Training Program must successfully complete the classroom study. A final examination is given to help determine successful completion of the Chemical Surety and Hazardous Waste Management courses.

- 5.3 Personnel who do not successfully complete this training are given remedial training to ensure they have an adequate understanding of chemical surety and hazardous waste management concepts. Each employee also receives annual refresher training in the above areas. The scheduled length of each training course is detailed in Section 3 of this Attachment.

- 5.4 The training program is a dynamic program that is updated in response to new information and changes in the regulations. Each course outline remains relatively stable but the content is revised as necessary to remain current. The following is an outline of the subject matter in each initial and annual refresher-training course along with a brief description of each lesson:

**6.0 Chemical Surety Basic Course**

- 6.1 Chemical Munitions. Descriptions of the different types of chemical munitions and their various configurations including packaging and storage.
- 6.2 Chemical Personnel Reliability Program (CPRP). Identifies the positions that fall under the guidelines of Army Regulation (AR) 50-6 and provides a means of assessing the reliability of personnel in these positions.
- 6.3 Classification and Effects of Chemical Agents. Describes the types of nerve and blister agents, their physical characteristics, the physiological effects on the body, and the persistency of each agent.
- 6.4 Protective Clothing. Reviews protective masks, their proper use and care, and the different types of protective clothing and equipment available for protection from agents.
- 6.5 Chemical Agent Alarms/Detectors/Monitors. Describes the alarms for an agent emergency, the types of detection equipment used, and the monitoring methods used to detect and quantify agent concentrations.

- 6.6 Self-Aid/First Aid and Decontamination. Discussion of the different decontamination solutions for chemical agents and the proper use of the nerve agent antidote kit. Basic first aid including CPR is also taught.
- 6.7 Chemical Accident/Incident Control. Discussion of the different levels of a chemical event/accident, the response procedures during an incident, and the various teams that respond.
- 7.0 **Chemical Surety Refresher Course**
- 7.1 Chemical Safety/Security/Reliability. Review of chemical agent exposure limits and safety policies that reduce the risk of exposure to chemical agents. Discussion of security warning systems, security lighting, intrusion detection, and barriers to create and maintain controlled/restricted areas. Identifies the positions that fall under the guidelines of AR 50-6 and provides a means of assessing the reliability of personnel in these positions.
- 7.2 Classification and Effects of Chemical Agents. Describes the types of nerve and blister agents, their physical characteristics, the physiological effects on the body, and the persistency of each agent.
- 7.3 Protective Clothing. Reviews protective masks, their proper use and care, and the different types of protective clothing and equipment available for protection from agent.
- 7.4 Chemical Agent Alarms/Detectors/Monitors. Describes the alarms for an agent emergency, the types of detection equipment used, and the monitoring levels used to detect and quantify agent concentrations.
- 7.5 Self-Aid/First Aid and Decontamination. Discussion of the different decontamination solutions for chemical agents and the proper use of the nerve agent antidote kit. Basic first aid including CPR is also taught.
- 8.0 **Department of Defense Hazard Communication Course**
- 8.1 OSHA Hazard Communication Standard. This lesson stresses that employees must be informed about hazardous chemicals in their workplace and be trained to work safely with them.
- 8.2 Physical Forms and Exposure Hazards. This lesson discusses the three basic physical forms: solids, liquids, and gases. Types of exposure hazards, which include physical hazards and health hazards, are also discussed.
- 8.3 Types of Physical and Health Hazards. This lesson discusses physical hazards, which are chemicals that cause explosion, fires, violent chemical reactions, or other hazardous situations. Health hazards, chemicals that can cause illness or injury when inhaled or swallowed, or through contact with the skin or eyes, are also discussed.
- 8.4 Controlling Chemical Hazards. This lesson discusses the basic methods of controlling chemical hazards, which are engineering controls, personal protective equipment, and administrative controls.
- 8.5 Introduction to Material Safety Data Sheets (MSDSs) and MSDS Physical Hazard Information. This lesson discusses the general layout of an MSDS and where to find and understand the

information in the physical data section, the fire and explosion hazard section, the reactivity data section and the precautions for safe handling and use section.

**8.6** MSDS Health Hazard Information. This lesson teaches how to find and understand the information in the hazardous ingredients section, the health hazards section, and the control measures section.

**8.7** Using Labels and the Hazardous Chemical Inventory. This lesson discusses labeling requirements. Labels must contain all appropriate hazard warnings. The name must be the same on the label, the MSDS, and the hazardous chemical inventory list. Hazardous chemical inventory lists must be available and kept up to date.

**9.0 Hazardous Waste Management Course (Initial and Refresher)**

**9.1** RCRA, OSHA, and Army Regulations. This lesson is a brief overview of various regulations, which also include UHWMR, water, air, and hazardous materials regulations. Permit history at DCD, permit training requirements, and the penalties that may be imposed for noncompliance are also discussed.

**9.2** Hazardous Waste Identification. This lesson discusses when a material becomes a hazardous waste, gives the definition of F999 and P999, provides a list of various materials that are managed as hazardous waste at DCD, and requirements of the hazardous waste label.

**9.3** Hazardous Waste Management. This lesson describes the various information required for the DCD operating record, additional record keeping requirements, spill or release notification requirements, the permitted storage and process areas at DCD, hazardous waste movement between these areas, and the forms used to collect hazardous waste treatment and storage information.

**9.4** Hazardous Waste Handling Procedures. This lesson discusses the selection of proper containers for waste, aisle space requirements in storage areas, and that training for new employees must be completed within six months.

**9.5** Waste Analysis. The lesson topics include the general requirements of the Waste Analysis Plan, hazardous waste characteristics, laboratory certification, and documentation of waste analysis.

**9.6** Maximum Exposure Limits. This lesson reviews chemical agent exposure limits and the use and selection of proper personal protective equipment (PPE) for the type of work performed.

**9.7** Key Waste-Feed Cutoff Parameters. This lesson discusses furnace operating parameters and other treatment/process indicators that are monitored and the steps that must be taken when a parameter goes out of line.

**9.8** New Technologies and Engineering Controls. This lesson describes new and/or alternate technologies at DCD and how engineering controls are used to prevent worker exposure or reduce worker exposure below permissible exposure limits.

**9.9** Emergency Response. This lesson discusses the implementation of various spill plans: the CAIRAP, the ISCP, the SPCCP, the Chemical Agent Munitions Disposal System (CAMDS) Contingency and Spill Control Plan, and the role of the Area Response Team (ART) or local area

responders during spill response and clean up. Site sirens, alarms, emergency phone numbers, and individual employee actions for spill notification are also reviewed.

- 9.10** Waste Minimization. Waste minimization goals and methods and ideas to minimize the generation of hazardous waste with emphasis on reducing persistent, bioaccumulative, and highly toxic chemicals are discussed in this lesson. The DCD Pollution Prevention Plan (P2 Plan) is also discussed.
- 9.11** MSDSs. This lesson informs employees of the location of the “Right to Know” centers that contain MSDSs and additional safety and emergency response information. A brief review of how to read and understand the information in a MSDS is also presented as a yearly refresher of the OSHA Hazard Communication Standard.

## **10.0 On-The-Job Training**

- 10.1** DCD personnel receive on-the-job training from their supervisor based on the individual’s job description. The training includes contingency plan implementation and familiarization with emergency procedures and equipment for the employee’s applicable work area. The supervisor also provides training on applicable Standing Operating Procedures (SOPs). Additional on-the-job training occurs when a new hazardous material is introduced to the work place, or a new procedure is implemented.